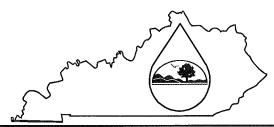
KPDES FORM SDAA



Kentucky Pollutant Discharge Elimination System (KPDES)

Socioeconomic Demonstration and Alternatives Analysis

The Antidegradation Implementation Procedure found in 401 KAR 10:030, Section 1(3)(b)3 requires KPDES permit applications for new or expanded discharges to waters categorized as "Exceptional or High Quality Waters" to conduct a socioeconomic demonstration and alternatives analysis to justify the necessity of lowering local water quality to accommodate important economic or social development in the area in which the water is located. This demonstration shall include this completed form and copies of any engineering reports, economic feasibility studies, or other supporting documentation

I. Project Information

Facility Name: Webster County Coal, LLC.

Location: 1586 Balls Hill Rd., Nebo, KY 42441 County: Hopkins

Receiving Waters Impacted: UT of Pond Creek

II. Socioeconomic Demonstration

1. Define the boundaries of the affected community:

(Specify the geographic region the proposed project is expected to affect. Include name all cities, towns, and counties. This geographic region must include the proposed receiving water.)

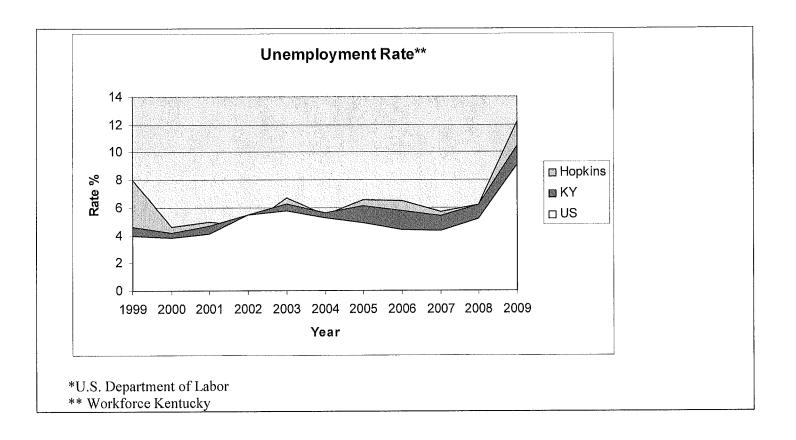
Webster County Coal(WCC) is located in the Western Kentucky coal fields. Madisonville, Nebo, Providence, Slaughters, Hanson and Earlington are the surrounding cities. This facility is located in western Hopkins County. The proposed receiving water is an unnamed tributary of Clear Creek.

2. The effect on employment in the affected community:

(Compare current unemployment rates in the affected community to current state and national unemployment rates. Discuss how the proposed project will positively or negatively impact those rates, including quantifying the number of jobs created and/or continued and the quality of those jobs.)

Unemployment data for April 2009*, indicated that there were 2,033 people in Hopkins County currently unemployed and seeking employment.

By improving the ventilation and miner access Webster County Coal will be able to operate efficiently and will increase the life of the mine. Keeping workers in the surrounding counties employed. However, this modification will provide no new or additional jobs, increase in revenues or additional taxes. This modification is needed for a number of reasons. The most important is that new and updated ventilation for the underground mine is required. Due to its expanded size a new hole must be dug it makes fiscal sense to include a new portal for miner access. Currently the underground operations have expanded far enough from the main portal that miners have to travel more than 8 miles to arrive at the mine face. This new portal that will be used for ventilation and will also be used for miners and supplies.

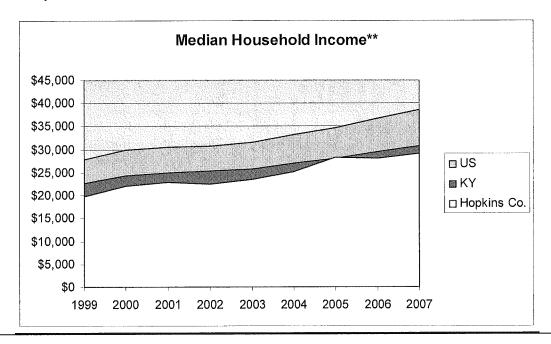


II. Socioeconomic Demonstration- continued

3. The effect on median household income levels in the affected community:

(Compare current median household income levels with projected median household income levels. Discuss how proposed project will positively or negatively impact the median household income in the affected community including the number of households expected to be impacted within the affected community.)

This permit modification will increase the life of the mine. Thus keeping approximately 400 miners employed.



4. The effect on tax revenues of the affected community:

(Compare current tax revenues of the affected community with the projected increase in tax revenues generated by the proposed project. Discuss the positive and negative social and economic impacts on the affected community by the projected increase.)

The continuation of this project will allow severance tax to continue to be paid to the state and county. Fiscal year 2006-2007 saw \$16,682,472 paid in total coal severance taxes for Hopkins County.

II.	Socioeconomic Demonstration- continued
5.	The effect on an existing environmental or public health in affected community: (Discuss how the proposed project will have a positive or negative impact on an existing environmental or public health.)
	The addition of this project will have no direct effect on the surrounding community. This site was previously agricultural land and this operation will eliminate non-point wastewater.
6.	Discuss any other economic or social benefit to the affected community: (Discuss any positive or negative impact on the economy of the affected community including direct and or indirect benefits that could occur as a result of the project. Discuss any positive or negative impact on the social benefits to the community including direct and indirect benefits that could occur as a result of the project.)
	This project will provide no new or additional jobs. However, choosing not to mine this area as an alternate to lowering water quality was evaluated but the loss of 400 jobs and the resulting \$32 million dollars in collective salaries, the loss of approximately 1200 other indirect job resulting from this project as well as the loss of revenues including severance tax estimated at \$17 million dollars annually would have negative economic consequences.

III. Alternative Analysis

1. Pollution prevention measures:

(Discuss the pollution prevention measures evaluated including the feasibility of those measures and the cost. Measures to be addressed include but are not limited to changes in processes, source reductions or substitution with less toxic substances. Indicate which measures are to be implemented.)

We do not anticipate any treatment costs for the storm water runoff from the bathhouse/office complex. However, if suspended solids become elevated we may utilize a flocculant.

This project will eliminate non-point source agricultural run off from this project area which has affected this watershed. Drainage from this area will be directed through the sediment structure preventing excessive siltation and fertilization of the stream reach. This will also eliminate the possibility of pesticides finding their way into the surface water. The discharge from this outlet will be monitored so that sub-standard discharge should not occur. Drainage control for this area will lead to healthier habitat for aquatic species and other wildlife and an area that is ecologically functional and aesthetically pleasing. Reclamation plans call for development of a wildlife and fish habitat and commercial area

2. The use of best management practices to minimize impacts:

(Discuss the consideration and use of best management practices that will assist in minimizing impacts to water quality from the proposed permitted activity.)

It is the policy of Webster County Coal, LLC.(WCC) to operate it's facilities in an environmentally responsible manner minimizing the potential for release of pollutants to the environment from ancillary activities, to immediately respond and provide sufficient resources for the mitigation of any environmental incident that may originate from it facilities.

It's the objective of WCC to maintain and implement up to date Spill Prevention and Control Countermeasures, Groundwater Protection Plans, Hazard Communication and Inventory/Waster Management and Contingency. Also it is the responsibility of WCC to identify those areas which pose potential risk(s) to the environment from an uncontrolled release of pollutants, which must then be assessed, provide controls and procedures to minimize and establish response procedures in the event an incident occurs.

3. Recycle or reuse of wastewater, waste by-products, or production materials and fluids:

(Discuss the potential recycle or reuse opportunities evaluated including the feasibility of implementation and the costs. Indicate which of, of these opportunities are to be implemented)

The proposed basin is to control surface water runoff from the site. This area is a mine management area including access portals, office areas, parking and topsoil storage areas. Land application is not applicable.

Potable water will be supplied by Madisonville Westside Waster Water Treatment Plant.

The drainage area for this permit is 41.2 acers. Kentucky DNR mining permit 854-0234 requires that run off from a 25 year 24 hour rain event be controlled in the containment structure. In order to reuse or recycle this water, a central collection and distribution system would have to be constructed. The construction of said system would exceed \$1,000,000. This would hinder the profitability of this project since the water cannot be used at this site.

ш	. Alternative Analysis - continued
4.	Application of water conversation methods: (Discuss the potential water conservation opportunities evaluated including the feasibility of implementation and the costs. Indicate which of, of these opportunities are to be implemented)
	This basin will control surface water run-off from the facility. As a result the water will not be used for other purposes.
5	Alternative or enhanced treatment technology: (Compare feasibility and costs of proposed treatment with the feasibility and costs of alternative or enhanced treatment technologies that may result in more complete pollutant removal. Describe each candidate technology including the efficiency and reliability in pollutant removal and the capital and operational costs to implement those candidate technologies. Justify the selection of the proposed treatment technology.)
	The nearest municipal sewage treatment facility is the Nebo Water District 4 miles west of the facility site. This plant was not designed for or capable of effectively treating either type (high solid) or volume of water involved with this project. Influx of water from this project would likely overload this facility resulting in a bypass which would lead to a discharge of untreated municipal wastes creating a serious public health hazard and violations at this facility
	Routing of water to this plant would require 26,930 ft of line, a network of pump and lift stations, and obtaining numerous right-of-ways and easements. Conservatively estimating line @ \$22/ft, two lift stations at \$75,000 each, ignoring other state requirements, the minimum cost of this option would exceed \$500,000.
	Transporting this volume of water by self-contained disposal trucks would greatly increase the operational cost of this project. Based on a 25 year, 24 hour rain event, the possible peak discharge from this project could exceed 40,000 gpm. Rates quoted from Somerset Environmental in Somerset, KY indicated charges of \$65/hour (gate to gate)/3,000 gallon pick-up of non-hazardous wastewater and a \$0.49/gallon disposal fee.

III. Alternative Analysis - continued					
6.	Improved operation and maintenance of existing treatment systems: (Discuss improvements in the operation and maintenance of any available existing treatment system that could accept the wastewater. Compare the feasibility and costs of improving an existing system with the feasibility and cost of the proposed treatment system.)				
	There are no treatment facilities on site. The current facility plans on using a septic tank system for the proposed office and bathhouse.				
7.	Seasonal or controlled discharge options: (Discuss the potential of retaining generated wastewaters for controlled releases under optimal conditions, i.e. during periods when the receiving water has greater assimilative capacity. Compare the feasibility and cost of such a management technique with the feasibility and cost of the proposed treatment system.)				
	The proposed basin will control surface run-off. Choosing not to mine this area as an alternate to lowering water quality was evaluated but the loss of 400 jobs and the resulting \$32 million dollars in collective salaries, the loss of approximately 1200 other indirect job resulting from this project as well as the loss of revenues including severance tax estimated at \$17 millions dollars annually would have negative economic consequences.				

III. Alternative Analysis - continued

8 Land application or infiltration or disposal via an Underground Injection Control Well

(Discuss the potential of utilizing a spray field or an Underground Injection Control Well for shallow or deep well disposal. Compare the feasibility and costs of such treatment techniques with the feasibility and costs of .proposed treatment system.)

The construction of an on-site wastewater treatment type plant would require a facility engineered to handle over 2,700 gpm during a 24 hour, 25 year storm event.* Construction cost for package plants are engineered to the specific location, load and other conditions but with a required collection system would be expected to exceed \$1 million dollars. These plants require a continual power source, daily maintenance, periodic repair and leave a large footprint. After completion og this project, the plant would either have to be removed or abandoned to unsightly dangerous rubbish.

*The Rational equation is the simplest method to determine peak discharge from drainage basin runoff. It is not as sophisticated as the SCS TR-55 method, but is the most common method used for sizing sewer systems

The installation of a sanitary septic system, i.e., septic tank was evaluated but is not an applicable option based on the *volume and type of water resulting from this project*. A required calculated 24 hour, 25 year rainfall event would lead to a very large discharge of more than 3,888,000 million gallons per day. This would require the construction of a very large containment structure. Septic systems are designed to degrade organic waste and biodegradable material over time by anaerobic digestion. While the source water would most likely contribute some organic material and some needed bacteria, this would be inadequate to decompose the sediment and this would work essentially the same as a sediment structure.

Since this is an active mine area no water is allowed to be injected into mine works under MSHA guidelines. Deep well injection is a possible alternative. The only formation that would be capable of handling the wastewater would be approximately 2,500' feet underground. At this depth a large drill rig would be required. A rig capable of installing a 2,500' steel lined well requires a concrete footer with a pad to provide the stability necessary to a well of the required depth. The estimated cost for this activity is more than \$250,000 for well construction only. In addition, the volume of waste water exceeds the capacity of the receiving formation.

Based on the characteristics of the wastewater, land application is not a feasible or recommended option. It would also be a non-point source pollutant. Also it would easily enter Pond Creek because of proximity.

9 Discharge to other treatment systems

(Discuss the availability of either public or private treatments systems with sufficient hydrologic capacity and sophistication to treat the wastewaters generated by this project. Compare the feasibility and costs of such options with the feasibility and costs of the proposed treatment system.)

Webster County Coal also considered discharging the wastewater into the City of Nebo, KY POTW system. Discussions with Nebo City Officials indicated that the River View wastewater flow rates were higher than allowable pre-treatment permit limits. Thus, this option was eliminated from further consideration.

As an alternative treatment option, sand filtration was evaluated but deemed not applicable. Sand filtration is used primarily as a pre-treatment to remove microbial contaminates, not particulate matter, in storm run-off in smaller, urban areas. The high solids involved in a storm event could possibly clog the filtration unit rendering it ineffective. Sand filters do not control storm water flow and do not prevent downstream bank and channel erosions as proposed sediment structures are designed to do. Also, the operational effectiveness of these units in colder climates and freezing conditions are not yet known.

Using silt fences and straw bales for sediment control was considered as per BMP's but would be inadequate due to drainage area size.

Other mining methods were considered. Mining methods are dictated by the elevation, thickness of the seam and the amount of overburden covering the reserves. Continued deep mining is the only feasible method to recover these coal seams.

Constructing an on-site storm water treatment facility was considered. The volume of discharge and the lift required make this an extremely costly option. The calculated peak flow from a 25 year, 24 hour rainfall event using the rational equation Q=ciA where: Q = peak discharge, c = runoff coefficient based on land use, i = rainfall intensity in inch/hour, and A = drainage area in acres, would exceed 2,700 gpm. Consultation with Beckman Environmental in Cincinnati, OH, a company that specializes in these types of constructions, revealed a recent bid on a project in Columbus, OH involving a lift of only 30ft, a peak discharge of 3800 gpm, a grit removal tank, and influent and effluent lines at \$2.5 million.

IV Certification: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

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